

Assessment of the Broadband "Homework Gap" In Hartford

Prepared for Connecticut Office of State Broadband and Office of Consumer Counsel

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Introduction

Earlier this year, the Connecticut Office of State Broadband (OSB), a division of the Office of Consumer Counsel, engaged Strategic Outreach Services (SOS), a strategic communications enterprise founded by Janice Flemming-Butler of the Voices of Women of Color (Voices), to facilitate outreach and strategic planning for the purposes of assessing the affordability and accessibility of broadband internet services provided to all premises in the North End of Hartford (North Hartford).

This report specifically focuses on identifying challenges around the digital divide in education, specifically the "Homework Gap." The Homework Gap for purposes of this report is defined as the period when school-age children typically need at-home access to broadband internet service to complete schoolwork, approximately 6 pm – 10 pm. If a student does not have access to affordable broadband internet services during this time period, that student may face a "gap" of time where other students can complete schoolwork, but he or she cannot. Since web-based learning and assignments start in elementary school, the inability to access such services during these homework hours can create a persistent "falling behind" of Homework Gap students that only increases educational disparities for low-income students.

To provide further granularity on the scope of the broadband challenges in relation to education, the OSB solicited feedback from stakeholders in North Hartford regarding their experiences and challenges with connectivity, with particular emphasis on families with school-age children. To that end, SOS sought to engage members of various community groups in North Hartford.

In order to collect firsthand accounts and data regarding any Homework Gap challenges faced by North Hartford residents, Janice Flemming-Butler of SOS engaged members of various community groups in North Hartford and participated with Consumer Counsel Elin Swanson Katz and other members of the OSB at a number of Neighborhood Revitalization Zone (NRZ) meetings and other group meetings in North Hartford to hear testimony as to the inadequacy of affordable broadband internet access and the effects of that shortfall on educational opportunities and digital inclusion for North Hartford's citizens.



Findings: Local Stories with a Common Theme

The Assessment participants (Mrs. Flemming-Butler, Consumer Counsel Katz, and members of their offices) attended a number of the 14 Neighborhood Revitalization Zone (NRZ) group meetings, met with members of the Hartford Parent University, attended Upper Albany Main Street Design Committee meetings, and participated in the Digital Inclusivity Planning Initiative at the Hartford Public Library. See *Appendix A. Meetings Attended by Assessment Participants to Date*, for details. There were also numerous, less formal discussions with members of the Hartford community.

Many examples were collected from North Hartford residents documenting their struggles to find affordable broadband internet service for their school-age children, including the following:

- One resident discussed how students used the Wi-Fi access at a local McDonald's restaurant to do schoolwork, but that the restaurant changed its policies so as to limit the time a patron to could stay at a table, seemingly to discourage extended use of the Wi-Fi.
- Another told how her children would go out onto her porch, regardless of the weather, in an attempt to use Wi-Fi from a nearby school.
- Others expressed frustration that public schools shut down Wi-Fi access after-hours, so that students could not sit nearby and complete homework.
- Some parents recognized that broadband internet access was important to their children, but found it simply unaffordable, or that back balances prevented renewals.
- While attending meetings at public libraries, Assessment participants observed lines of children (and adults) queued up to use the libraries' computers before the libraries closed as early as 5 pm.
- There were also numerous expressions of frustration that a "smart phone" is often viewed by policymakers and the public as a substitute for a home connection for broadband internet access, when smart phones are typically expensive and difficult to use to complete written schoolwork or write papers.

It is clear that broadband internet service plays a significant role in educational progress in North Hartford. The limited access to quality technology impacts the learning experienced by many students who attend Hartford schools. This often results in a lack of equity for North Hartford students, which impacts their ability to leave school with the requisite tools needed to move on to higher education and to contribute to the state's workforce. Families affected by the Homework Gap, the majority of whom are minority and low-income, struggle to find access to affordable broadband internet services in their home, and also may require training and technical support once they obtain access. Surprisingly, such services are not available to many North Hartford residents at any price.

Moreover, during course of their meetings, Assessment participants heard from small business owners, which are the lifeblood of the North Hartford community. Many small businesses experience intermittent or extremely low-speed internet service, thereby impacting their bottom



line and desire for expansion. These challenges were previously documented in a report prepared by CTC Technology & Energy and published by the OSB in January 2016, "A Brief Overview of Broadband Deficiencies in Connecticut."

Based on the conversations with small business representatives, it appears that there has been little progress in obtaining faster, more affordable broadband service for small businesses in North Hartford since the January 2016 report.

Moving Forward: Local Challenges, Local Leadership, Local Solutions

The North Hartford Promise Zone is at a key inflection point. Budgetary constraints in the City of Hartford have led to implementation of a consolidation plan for the Hartford Public Schools. Similarly, the Hartford Public Library is looking at potential consolidation and reduction in services at its branches. Budget shortfalls are also due in part to low homeownership and the resulting limited tax revenue. Improving access to technology has the ability to impact this issue as well, as increased employability could lead to increased homeownership and neighborhood revitalization.

Fortunately, Hartford officials are keenly aware of the broadband challenges for their residents, and are actively seeking solutions to the challenges North Hartford residents face accessing affordable broadband internet service. The search for solutions by Hartford officials includes the following:

- Hartford Mayor Luke Bronin and senior members of this team met with Mrs. Flemming-Butler and Consumer Counsel Katz to discuss the opportunities available to improve broadband internet service along Albany Avenue in Hartford as part of the Promise Zone revitalization project that provides a "priority consideration" for federal funding for the Clay Arsenal, Northeast and Upper Albany neighborhoods.
- The Assessment participants have ongoing frequent communications with Hartford's
 legislative delegation, including Connecticut House Majority Leader Matthew Ritter,
 a lifelong Hartford resident, around the Homework Gap challenges and the delegation's
 ongoing commitment to improving access to affordable broadband internet service for
 Hartford residents and businesses.
- Council President T. J. Clarke, in his official capacity and as a resident of North Hartford, is committed to working with SOS and key stakeholders to ensure that broadband infrastructure and services are considered whenever there are development projects happening around schools and businesses.
- Bea Powell, Chairperson of the Clay Arsenal NRZ, and other members of this NRZ express their concerns with the cuts to libraries and the consolidation of schools in their community and how it will impact the limited broadband access the residents and

¹ Available at http://www.ct.gov/occ/lib/occ/20160124_ctc_report_on_connecticut_broadband_deficiencies.pdf



students have access too. She would like to see a comprehensive plan that gets strong broadband services into every family home in Clay Arsenal.

- Milly Arciniegas, Executive Director, Hartford Parent University, noted that Hartford Parent University engages, empowers and mobilizes parents to be a part of the decision-making process of their children's learning. Partnered with Hartford Public Schools, Hartford Parent University is building the demand for student-centered learning to transform systems to ensure every child has an equitable educational opportunity. Ms. Arciniegas recognized that one of the key principles to student centered learning is for students to be able to learn "Anytime/Anywhere." Having access to the internet is essential for students to be able to participate in project based learning and blended learning assignments. She feels we need to recognize public education is a foundational community resource and a public good—and one that every community member must play a role in.
- Denise Best, Chair, Upper Albany NRZ, finds that schools require our children to do their homework online and make the assumption that each child has access. This, unfortunately, is not our reality. Every week five hundred children are utilizing the technology in the library across the street to do their homework. Every day there are children who leave when the library closes without having had the opportunity to do their homework. We are not talking about playing games, or social media, we are talking about required homework. Even though the internet was invented in the US, Americans pay the most in the world for broadband access. We need to do better.
- Rhonda Leonard, Chairwoman of Blues Block Watch, remembers the times when Blue Hills had free Wi-Fi in the prior decade and would like to see every child, every elderly person, and every family again have access in the Blue Hills areas.
- Marilyn Risi, Executive Director, Upper Albany Main Street (UAMS), has also recognized that it is vital that the UAMS project include providing broadband internet service along the project corridor. UAMS is a 501(c)(3) designated National Main Street Community founded in 2000 by Upper Albany merchants, residents, and stakeholders to achieve sustained community and economic revitalization. UAMS received funding to coordinate a multi-year project that will design and create attractive and code-compliant facades for commercial structures along Albany Avenue and Homestead Avenue in North Hartford. This redevelopment and beautification initiative will complement and enhance the larger-scale Albany Avenue Streetscape to be undertaken by various State and City of Hartford agencies.
- Evelyn Dukes, President of the Voices, has witnessed first-hand the challenges our communities face with limited access to sound broadband services, from education, housing, public health, and voting.



• The University of Hartford is a primary supporter of the UAMS project, in cooperation with a number of similarly involved and concerned corporate and educational citizens within or bordering North Hartford, and it is hoped that the University will continue to consider improved broadband internet service as part of its revitalization efforts.

It is essential, however, that state and local leaders acknowledge the challenges faced by many North Hartford residents and businesses in obtaining affordable broadband internet service, and commit to continued work with the community to find solutions. The Homework Gap impact on the children of North Hartford will be felt for years or even decades if the problem is not addressed.

Overall, SOS found that the work by the Office of State Broadband, including at meetings convened by Mrs. Flemming-Butler, has been instrumental in raising awareness of the Homework Gap challenges in Hartford, engaging relevant stakeholders in a discussion of possible solutions, and facilitating interest by both incumbent and new internet service providers in working with the City of Hartford on increasing access to affordable broadband internet service in the North End of Hartford.

However, it is clear that "solving" the Homework Gap in North Hartford will be take time and potentially be technically difficult and costly. There is unlikely to be any one solution, but more likely, it will take a series of actions and investments by many different stakeholders to provide affordable broadband internet service to every North Hartford schoolchild. Despite these challenges – or perhaps because of them – it is essential that the dialogue around the Homework Gap continue throughout Hartford and indeed, throughout the state. In the short run, stakeholders will encourage businesses serving the general public and schools that *do* have high-speed broadband internet access to support their surrounding community by making arrangements to facilitate use by students, and not to put up barriers to such use.

Throughout the outreach process it was found that residents, schools and business owners experience challenges with connectivity and access. While the aforementioned report issued by CTC Technologies discusses the quality of broadband on an overall statewide basis, it also notes the inequities in broadband service in North Hartford.

The broadband industry and broadband developers should aspire to support the entire state, and not be satisfied with the persistence of "broadband deserts" in Connecticut's cities and rural areas. SOS sought to work with the OSB to ensure that North Hartford residents have equal opportunity and access to truly improve their lives and communities.

Recommended Next Steps:

The SOS and OSB should continue to serve in a general coordinating role related to message development and communications strategies, serving as catalysts to organize community leaders, residents, businesses, and anchor institutions in developing and communicating solutions for



deployment of affordable broadband internet service that is available to all North Hartford residents and businesses.



Tasks to Be Shared With All Interested Parties

- Convene community leaders, school representatives, business and industry stakeholders, ISPs, and state and local officials on a regular basis to continue the dialogue initiated by the OSB, with a focus on the following:
 - o (i) continued community engagement;
 - (ii) collaboration and sharing of ideas as to both traditional and non-traditional avenues for solving the Homework Gap in North Hartford and for all Connecticut schoolchildren; and
 - (iii) short-term measures to improve access by students outside of the home, at local businesses and schools, including (a) conducting outreach to local restaurants and businesses to develop "homework hours" and "homework hot spots" for the use of Wi-Fi strictly for homework; along with (b) further deployment of wireless-enabled laptops to schoolchildren to complete homework.
- Work with community organization, school officials, and industry stakeholders to gather
 additional information and raise awareness of existing programs and services available to
 low-income residents from incumbent internet service providers, including the Comcast
 Internet Essentials Program and attendant training programs; and Frontier Program for
 Low-Income Veterans;
- Outreach efforts regarding the development of affordable broadband internet access across North Hartford should continue in order to generate grassroots support and actions, through meeting facilitation, information dissemination, and conferences directed at all community groups (educational, K-12, technical, and higher education; small and large businesses; community anchor institutions); and
- Further development and consideration of municipal-wide or neighborhood solutions for deployment of affordable broadband internet services that is available to all Hartford residents and businesses.

Further Action Items by Local Officials, State Officials, and Local Internet Service Providers:

Role of Private Sector Internet Services Providers (ISP)

The criticality of broadband for education and equity is self-evident, and is reflected in Comcast's Internet Essential program, which subsidizes 10 Megabits per second (Mbps) internet service to low-income families whose children are eligible for the free and reduced school lunch program. Aggressive marketing of Internet Essentials and creation of other comparable programs



that will help to address the great need for internet service among Connecticut's lower-income schoolchildren should be key goals of the internet service providers in the state.

Further, while recognizing the importance of Internet Essentials, we note that its 10 Mbps bandwidth may not address the needs of low-income students for parity with their higher income peers who can afford higher bandwidth products. It is essential that the private internet service provision industry continue to expand and grow the subsidized products targeted toward lower income students if these products are indeed to provide some measure of equity.

Role of State and Local Governments

Both the state of Connecticut and localities throughout Connecticut are in a position to expand broadband infrastructure assets over time in cost-effective and low-risk manners. While construction of new broadband assets on an incremental basis will not immediately solve the broadband challenges our communities face, expansion of assets can in the medium and long term improve broadband availability and affordability.

The state and localities are all in a position to build fiber and conduit assets where the opportunity presents itself—for example, during capital improvement projects in the right-of-way where conduit can be placed during unrelated construction at very low incremental cost through a process known as "dig once." A dig once strategy can also be used during private sector trenching projects, during which public entities can place their own conduit, either through contractual agreements with the trenching entity or by means of ordinance or state law.

Over time, fiber and conduit assets can be built up to the point that they become valuable tools for public sector deployment of communications networks or leasing to private sector entities to reach unserved and underserved populations. Both state and local governments should also encourage and facilitate private sector deployment as is practical and feasible. But encouragement of private deployment should not reduce the momentum toward placement of public facilities for future use by both public and private entities wherever possible.



Appendix A. Meetings Attended By Assessment Participants to Date

The table below outlines the dates, locations and any relevant points that were made during those contacts.

Meeting Type	Meeting Location	Notes
Meeting with Hartford Parent	Hartford Public Library	Discussions with University
University representatives	February 2017	Parents around challenges
		faced by students in Hartford
		Public Schools access
		broadband in evenings for
		homework.
Hartford Public Library	Arlene Harris	Multiple state and community
Digital Inclusion Planning	Hartford Public Library	stakeholders strategizing
Initiative	6/21/17	around initiatives to increase
		digital inclusion in Hartford
Hartford Mayor's Office	Mayor Luke Bronin and staff	Discussions about Rt. 44
	City Hall	project and other potential
	6/7/17	initiatives to address
		broadband access inequities.
Comcast Internet Essentials	Sharon Codeanne and Rob	Discussions about how to
research	Earley	expand scope of access by
	OSB New Britain office	North Hartford citizens to
	5/31/17	Internet Essentials program.
NRZ official meeting	Clay Arsenal NRZ	Various community groups,
	Bea Powell	including Promise Zone staff,
	Community Health Services	and healthcare professionals
	500 Albany Ave.	voiced frustration at
	3/7/17	inadequate supply and high
		costs of broadband services.
NRZ official meeting	Upper Albany NRZ	Various community groups,
	Denise Best	including education, and
	Hartford Public Library	library officials voiced
	1250 Albany Ave.	frustration at inadequate
	3/6/17	supply and high costs of
		broadband services.
Information meeting	Janice Flemming-Butler,	OSB members began process
	Voices of Women of Color	of learning of intense but
	1/25/17	unmet demand among various
		North Hartford groups.

Mrs. Flemming-Butler also engaged in numerous less formal meetings with Community Counsel Elin Katz and OSB staff, as well as with North Hartford residents, small businesses, and community anchor institutions to gather their experiences.